

**4. Table 2 – Acceptance Limits of QC-QA Samples – All Producers
(modified 3_14_2013-Three Deviations from 5 yr mean)**

<u>TABLE 2</u>	<i>**Acceptance Limits of QC-QA Samples – All Producers</i>	
	** PG Grade Acceptance Limits	Test Method Reference:
Rotational Viscosity @ 135 (Pa-s)	PG 58-22: 0.275-3.00	AASHTO T 316
	PG 58-28: 0.197-3.00	
	PG 64-22: 0.224-3.00	
	PG 70-22: 0.475-3.00	
	PG 70-28: 0.316-3.00	
	PG 76-22: 0.742-3.00	
Original Binder: G*/sin delta (kPa)	PG 58-22: 1.00-1.77	AASHTO T 315
	PG 58-28: 1.00-2.09	
	PG 64-22: 1.00-2.33	
	PG 70-22: 1.00-2.15	
	PG 70-28: 1.00-2.23	
	PG 76-22: 1.00-1.92	
RTFO/TFO Residue: G*/sin delta (kPa)	PG 58-22: 2.20-4.72	AASHTO T 315
	PG 58-28: 2.20-6.13	
	PG 64-22: 2.20-6.22	
	PG 70-22: 2.20-5.73	
	PG 70-28: 2.20-5.52	
	PG 76-22: 2.20-4.38	
PAV Residue: G*/sin delta (kPa)	PG 58-22: 1187-5000	AASHTO T 315
	PG 58-28: 1681-5000	
	PG 64-22: 1496-5000	
	PG 70-22: 818-5000	
	PG 70-28: 785-5000	
	PG 76-22: 491-5000	
BBR Creep Stiffness (MPa)	PG 58-22: 54-300	AASHTO T 313
	PG 58-28: 126-300	
	PG 64-22: 63-300	
	PG 70-22: 13-300	
	PG 70-28: 130-300	
	PG 76-22: 68-300	
BBR Slope -m value	PG 58-22: 0.300-0.453	AASHTO T 313
	PG 58-28: 0.300-0.396	
	PG 64-22: 0.300-0.411	
	PG 70-22: 0.300-0.377	
	PG 70-28: 0.300-0.362	
	PG 76-22: 0.300-0.400	

*Footnote for Table 2: Low limits shall not affect acceptance unless a specification applies. But if the acceptance limits maximum range for Original Binder, RTFO and/or BBR-Slope, m-value is less than the producer's calculated three deviation control limit maximum for the parameter, the lesser of the two is used for evaluation. An example for PG 64-22 follows: 6.55 is reported for an RTFO test and the calculated three deviation limit is 6.85. We know 6.55 is the lesser of the two numbers so an investigation is warranted after a call to stop shipment is placed. The 6.55 is beyond the Table 2 acceptance maximum for RTFO and shall not be shipped to NC projects.

Note: * Acceptance limits values subject to change.

** When an acceptable number of QC data points have been attained from a Producer and the corresponding NCDOT QA verification data point(s), producer-specific acceptance limits will then be determined and sent to the Producer upon request. For an example of typical producer-specific acceptance limits see Appendix X.